

Information # 14411

Category: UNCLASSIFIED Date: 10/10/2013

BACKGROUND AND DESCRIPTION: The system supports the following

video

other designated users. The system will serve these users as follows:

Two ground stations, one located in the United States and one within the COMUSMACV region, process and transmit satellite mission data. The Joint Chiefs of Staff have designated the following organizations as users of DCP data: Continental Air Defense Command (CADCOM), Aerospace Defense Command (ADC), Strategic Air Command (SAC), National Military Command Center (NMCC), Atlantic Command (ATLANTCOM), Pacific Command (PACOM), European Command (EUCOM).

Planned system improvements are intended to prolong the useful life of each satellite, make the satellite more survivable, increase the probability of data availability.

RELATED ACTIVITIES:

The Defense Satellite Communications System, Phase II (DSCS-II, 33110F) will provide an alternative communications route. Advanced Airborne Command Post (AARNCP, 64723F) is a potential user of this program's data. DCP is a key element of the Worldwide Military Command and Control System (WWMCCS) and is related to the other elements of the WWMCCS.

1. The first step is to identify the problem. In this case, the problem is that the company is not meeting its sales targets. The second step is to analyze the data. The third step is to develop a plan. The fourth step is to implement the plan. The fifth step is to evaluate the results.

[illegible]

The Aerospace Corporation, Inglewood, CA, provided General Systems Engineering/Technical Management support to the BCF System Program Office.

PROGRAM ACC. IMPL. COMMENTS AND FUTURE PLANS:

1. FF 1973 and Prior Accomplishments: The program has provided for procurement of 12 satellites and 11,741,110 bits, construction of two data processing facilities, ground and SHAR, user display equipment, software, communications equipment, and a training facility. The training facility is also used for software development and mission data analysis.

Future launches will be conducted to replenish

Project Activity #4: Satellite System Development

Program Element 4: Satellite System Development

Satellites currently being developed primarily for the Defense Satellite Communications System (DSCS) will be used to provide the Defense Satellite Communications System (DSCS) with the capability to provide secure, reliable, and high rate communications.

1. FY 1975 Program: expenditures will support development of the satellite system.

to provide the satellite for payload (i.e., any orbit) deployment. Funding is provided to enable the satellite to enable it

to increase the satellite's output power, thereby enabling for data to be received by smaller, less costly antennas; to increase the satellite's reliability;

Further, funding is provided to analyze and evaluate satellite data;

to continue support of ICBM Augmentation; to provide satellite circuit and test equipment; to provide satellite tracking and training equipment; to provide support for software development; to complete ground station shielding work and make necessary shielding repairs; to begin fabrication of initial small processing station (SIS); and to produce an IBM 360/75 computer used in software development and simulation.

3. FY 1975 Planned Program: The planned FY 75 program is being continued for initial development and operational modification.

to continue to analyze and evaluate selected satellite data,

and to provide continued support of ICBM Augmentation. Additional funding is provided to begin development of software to be used with small processing stations, and to continue fabrication of a small processing station started during FY 74.

4. Program to Completion: RDT&E funding will support continued or primary development of the satellite system in support of DOD requirements. Primary emphasis will be directed toward eliminating identified deficiencies discovered during operational employment.

Project Activity #4 - Military Communications and Related Facilities

Procurement # 1, 2, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

1. History:

	<u>Date</u>	<u>Estimated Cumulative Cost to Reach Milestone (in Millions)</u>
a.		397.1
b.		405.8
c.		382.1
d.		392.0
e.		
f.		397.2
g.		405.8
h.		445.0
i.		456.2
		471.8

Summary: (in Millions)

	<u>FY 73 and Prior</u>	<u>FY 1974</u>	<u>FY 1975</u>	<u>FY 76-79</u>	<u>Total* Estimated Cost</u>
RF/AF: Funds	406.3	62.1	33.4	33.8	535.6
Quantities					
Satellites/boosters	4/1	0	0	0	4/1
Procurement:					
Funds (3020, 3030)*	616.0	28.1	91.7	477.8	1,203.6
Quantities					
Satellites/boosters	8/11	0/0	1/0	5/6	14/17

* Excludes funds funded in Other Procurement, Air Force.

** Through FY 70

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FY 1975 RDT&E DESCRIPTIVE SUMMARY

Program Element #	<u>[??]43[?]F</u>	Title	<u>Defense Support Program</u>
Catagory	<u>Strategic Forces</u>	Budget Activity	<u>#4 - Military Astronautics and Related Equipment</u>

BACKGROUND AND DESCRIPTION: The Defense Support Program (DSP)
[Excised] and related developments. The DSP satel-
[Excised] The system pro-
vides [Excised]
[Excised] to our national command authorities and
other designated users. The system also serves these more specific purposes:

[Excised]

Two ground stations, one overseas and one within the CONUS receive, process and transmit satellite mission data. The Joint Chiefs of Staff have designated the following organizations as users of DSP data: Continental Air Defense Command (CONAD), Aerospace Defense Command (ADC), Strategic Air Command (SAC), National Military Command Center (NMCC), Atlantic Command (LANTCOM), Pacific Command (PACOM), European Command (EURCOM), [Excised]

[Excised]

Planned system improvements are intended to improve the useful life of each satellite, make the satellite more survivable [Excised] increase the probability [Excised] data will be available [Excised]

RELATED ACTIVITIES:

System, Phase II (DSCS-II, 33110F) will provide an alternative communications route. Advanced Airborne Command Post (AABNCP, 64723F) is a potential user of this program's data. DSP is a key element of the Worldwide Military Command and Control System (WWMCCS) and is related to the other elements of the WWMCCS.

[Excised]

Project Activity #4 - Military Astronautics and Related Equipment

Program Element # [?]431F

Title Defense Support Program

WORK PERFORMED BY: CINCONAD has been designated to maintain operational control of the DSP system. [???]ation and technical management are the responsibility of the USAF Aerospace Defense Command (ADC). The Air Force Logistics Command (AFLC) provides logistic support. The Space and Missile System Organization (SAMS0) of the Air Force Systems Command (AFSC), Los Angeles, CA, has the overall development and procurement management and responsibility for the DSP. TRW, Redondo Beach, CA, is the prime contractor for the space[Excised] sensor. Western Development Laboratories/Philco Ford, Palo Alto, CA, is the prime contractor for the User Display Segment and the Data Acquisition and Communications Segment. Aerojet Electrosystems and IBM, Westlake, CA, are responsible for the system's software development. System Development Corporation, Santa Monica, CA, is responsible for software configuration management and integration. The Martin Company, Denver, CO, is responsible for the TITAN IIIC booster and Eastern Test Range (ETR) launch support. The Atomic Energy Commission (Sandia Corporation) is responsible for [Excised]

The Aerospace Corporation, Englewood, CA, provides General Systems Engineering/Technical Direction support to the DSP System Program Office.

PROGRAM ACCOMPLISHMENTS AND FUTURE PROGRAMS:

1. FY 1973 AND PRIOR ACCOMPLISHMENTS: The program has provided for procurement of 12 satellites and TITAN IIIC boosters, construction of two data processing facilities (overseas and CONUS), user display equipment, software, communications equipment, and a training facility. The training facility is also used for software development and mission data analysis.

[Excised]

Future launches will be conducted to replenish

Budget Activity #4 - Military Astronautics and Related Equipment

Program Element # [?]43[?]F TITLE Defense Support Program

[Excised] satellites currently deployed when operationally required. An [?]SC-46 communications terminal has been installed at the Overseas Ground Station (OGS) which will enable DSP data to be transmitted to the CONUS via Defense Satellite Communications System Phase II (DSCS-II) communications satellite, thus providing an alternate communications mode [Excised]

2. FY 1974 Program: Expenditures will support completion of modifications necessary [Excised] to prepare the satellite for possible universal (i.e., any orbit) deployment. Funding is provided to modify the satellite to enable it [Excised] to increase the satellite's output power, thereby enabling DSP data to be received by smaller, less costly antennae; to increase the satellite's on-orbit reliability; [Excised] Further, funding is provided to analyze and evaluate collected satellite data; [Excised] to continue support of DSP Augmentation; to provide automatic circuit card test equipment; to procure satellite tracking set (STS) training equipment; to provide support for software development; to complete ground station shielding tests and make necessary shielding repairs; to begin fabrication of an initial small processing station (SPS); and to procure an IBM 360/75 computer used in software development and modification.

3. FY 1975 Planned Program: The planned FY 75 program includes expenditures for initial development of an operational modification [Excised] [Excised] to continue to analyze and evaluate collected satellite data, [Excised]

[Excised]

and to provide continued support of DSP Augmentation. Additional funding is provided to begin development of software to begin new processing stations, and to continue fabrication of a small processing station started during FY 74.

4. Program to Completion: RDT&E funding will support continued revolutionary development of the satellite system in support of DOD requirements. Primary emphasis will be directed toward eliminating or minimizing deficiencies discovered during operational employment.

Budget Activity #4 - Military Astronautics and Related Equipment

Program Element # [?]43[?]F Title Defense Support Program

5. Milestones: